

## EXECUTIVE SUMMARY

### PUBLIC-PRIVATE PARTNERSHIPS USING ALTERNATIVE FINANCING AND BEST PRACTICES FOR HIGHWAY IMPROVEMENTS

20<sup>th</sup> century finance strategies for public investment in highways are a mismatch for the 21<sup>st</sup> century missions in transportation. In part; meeting 21<sup>st</sup> century requirements involves effective integration of priorities across levels of government, use of innovation, expediting administrative processes, and placing more emphasis on operations instead of expansion.

Partnerships between state DOT's, local governments, and the private sector are essential for effective integration of public-private priorities. Additionally, alternative approaches to project development, administrative processes, and the use of best practices in design characteristics are key ingredients for meeting challenges and maintaining or improving traffic system operations.

The US 23 and Lee Road project currently under construction is an example where effective integration of priorities, alternative business approaches, and the use of best practices serves to meet the challenges of economic growth, population growth, while maintaining the level of service of a freeway interchange and two local road intersections in a rural community.

The Office of Research and National Best Practices, the University Region, and the Brighton TSC developed a PowerPoint presentation. This presentation outlines key discussion points to share pertinent information regarding the US 23 and Lee Road project development, use of best practices, potential process barriers, and some unique features about the projects funding.

## Public/Private Partnerships

June 12, 2006

The department is beginning to utilize a combination of public/private financing to make infrastructure improvements on the state trunkline system. A recent example is the ongoing interchange improvements at the US-23/Lee Road interchange in Brighton. Improvements at the interchange began in the Fall of 2005 and will be completed in August 2006. These efforts have required significant coordination between state, county and local agencies along with the private developer. To date, the permit administrative process has been used to accomplish these partnerships.

The following is a list of items to consider when developing these partnerships from inception to construction and future maintenance:

### Administrative Process

- Possible Roadway Improvement Agreement (Memo of Understanding)
- Traffic Impact Study
- Design Standards and Exceptions
- Maintaining Traffic Requirements
- Formal Plan Review Meetings
- Identify Right-of-Way Needs
- Developer to secure right-of-way with private funds
- Developer and/or city/local governments to share finance of any/all special design review costs borne by road agency(s)
- Legislative Notification
- Special Construction Bonding
- Standard Insurances
- Developer to finance construction engineering cost incurred by the road agency(s)
- Developer Secured Contractor
- Developer to reimburse road agency(s) for all special signing produced by the road agency
- Develop and secure any necessary maintenance agreements

Public/Private partnerships require that reviews are performed in a timely manner and that all parties are committed to their roles. Department work areas need to be involved early in the process to ensure that MDOT is seen as working with other parties efficiently. Internal work areas involved with the TSC include the Attorney General, Region Real Estate, Lansing Traffic & Safety (Signals, Signs and Geometrics), Lansing Planning (Project Planning) and others as necessary.

In addition, TSC staff need to maintain frequent contact with the involved county and local governmental agencies. The TSC needs to understand the developer's relationship with the local planning commission and the type of agreement that the developer is operating under at the local level (Planned Unit Development, Downtown Development Authority, etc.)

Please feel free to contact Steven Bower, Brighton TSC Manager, at 810-225-2622 to discuss more specifics about the Public/Private Partnership effort at the US-23/Lee Road Interchange.

## Public Private Partnerships

### US-23/Lee Road Interchange Improvement

- Office of Research and Nat'l. Best Practices
- University Region
- Brighton TSC



## Presentation Outline

- Project Overview
- Administrative Process
- Technical Requirements
- Design Alternatives
- Construction/Maintenance Challenges
- Potential Barriers

## US-23/Lee Road Interchange

### Project Overview

- Project Scope
  - Rebuilt Ramps and County Road Intersections
  - Roundabout Design
  - Park & Ride Replacement
- Project Schedule/Cost
  - Partnering in 2004/2005
  - East Side Completed in 2005
  - West Side Completed in August 2006
  - Approx \$5 Million Const



## US-23/Lee Road Interchange

### Project Overview

- Public Benefits
  - Less Congestion
  - Improved Safety
  - Improved Park & Ride
  - Privately Funded
  - Interchange Improvements completed sooner than if publicly funded
- Developer Benefits
  - Enhanced Profit Potential for 600,000 sq ft Mall
  - Improved Relationship with Government
  - Improved Long Term Access



## Parties Involved

- MDOT
- Livingston County Road Commission
- Green Oak Township
- Quadrants Incorporated - Developer
- Parsons Group – Developer Consultant

## Permit Administrative Process

- Traffic Impact Study
- Formal Plan Review Meetings
- Roundabout Design Expertise
- PE Deposit Requirement with LCRC

## Permit Administrative Process

- Legislative Notification
- Special Construction Bonding with MDOT
- CE Deposit Requirement with LCRC
- Standard Insurances
- Developer Secured Contractor

## Technical Requirements

- Traffic Analysis Required for the Long Term
  - 3.0% Annual Traffic Growth (2005-2010)
  - 1.5% Annual Traffic Growth (2011-2030)
- Background Traffic Included
- Analyzed Breakdown Year without Bridge Widening (2019)
- LOS D Maximum for all moves

## Design Alternatives

- Single Point Urban Interchange
- Roundabout Interchange
- Diamond Interchange with Roundabouts
- Partial Diamond Interchange with Roundabouts

## Preferred Design Alternative

- Partial Diamond with Single East Roundabout and Double West Side Roundabout



## Construction/Maintenance Challenges

- Maintaining Traffic
- Ramp Lighting
- Span - Wire Signage
- LCRC Agreement - Maintenance Responsibilities

## Potential Barriers

- Developer Unwillingness to Fund Long Term Improvements
- Offsite Improvements – Legal Issues
- Lack of Cooperation from Local Gov't
- Developer's interest in a design/build approach verses the traditional approach.
- Developer's interest in a fast-track delivery process pose many challenges for the traditional review and coordination processes.